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EXAMINER	
DAILEY, THOMAS J	
ART UNIT	PAPER NUMBER
2152	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/763,448	CABRERA ET AL.	
	Examiner	Art Unit	
	THOMAS J. DAILEY	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 April 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-38 are pending.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 4, 2008 has been entered.

Response to Arguments

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-12, 14, 16-25, 27, and 29-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mani et al ("Use SOAP-based intermediaries to build chains of Web service functionality", Mani, Anbazhagan and Nargarajan, Arun,

September 2, 2002, <http://www.ibm.com/developerworks/webservices/library/ws-soapbase/>), hereafter "Mani," in view of Mitra ("SOAP Version 1.2 Part 0: Primer," Mitra, Nilo; May 7, 2003, <http://www.w3.org/TR/2003/PR-soap12-part0-20030507/>)

6. As to claim 1, Mani discloses I a network environment that includes a receiving computing system capable of receiving messages from other computing systems in the network environment, the receiving computing system including a dispatching component that dispatches a received message to groups of one or more methods for further processing, a method for the dispatching mechanism to dispatch a received message even though the dispatch mechanism may not have direct access to some information relevant for the dispatch, and even though that information is not present or is not easily obtained from the message as received by the receiving computing system (page 1, paragraph 2, an intermediary reads on "the receiving computing system" and possesses a dispatching component as it "forward[s] the altered message to the ultimate receiver"), the method comprising the following:

an act of receiving a message at the receiving computing system (page 1, paragraph 2 lines 4-5, intercepting reads on receiving);

an act of passing the received message through one or more receiving path components that are positioned in the receiving path of the message prior to being passed to the dispatching component, the passing of the received

message to the dispatching component occurring within the receiving computing system, each of the receiving path components in the receiving path being components of the receiving computing system (page 2, paragraph 2:lines 2-3, messages are processed before they are forwarded (dispatched), processing being internal to an intermediary);

an act of at least one of the one or more receiving path components modifying the message with at least one modification, the modification including information that is not included in the received message, the information being used by the dispatching mechanism to dynamically dispatch the message to an appropriate message processing method selected from a group of message processing methods (page 2, paragraph 7: bullet points 1 through 3, intermediary can remove or add SOAP headers and add new intermediaries (inherently containing methods to process messages) to the message path);

an act of the dispatching mechanism receiving the modified message from the receiving path within the receiving computing system (page 2, paragraph 2:lines 2-3, messages are processed before they are forwarded (dispatched));

based on the information obtained in the modification, an act of the dispatching mechanism using the obtained information to dynamically dispatch the message to an appropriate message processing method selected from the group of message processing methods for further processing (page 2, paragraph 7: bullet point 3, the intermediary node can modify the message's path by adding new intermediaries to it).

But, Mani does not explicitly disclose the dispatching the message to a group of one or methods within the receiving computing system, and the methods being configured to process the message according to the type of information included in the message. Rather, Mani discloses dispatching a message from one SOAP intermediary to another; not explicitly disclosing, one way or the other, if the SOAP intermediaries are on the same computing system or separate computing systems and further not disclosing that the type of information effects how an appropriate method processes the message.

However, Mitra discloses that SOAP nodes (and, by extension SOAP intermediaries) are applications defined by universal resource indicators (page 18, sec. 3.1: paragraph 3; "In Example 7a,...") and routing messages among SOAP intermediaries associated with applications (page 36, sec. 5.1: paragraphs 1-3, multiple applications can be stored on the same system as they are all associated with a common web server). Mitra further discloses methods are effected by the type of information that is included in the message (page 37: paragraph 3; "Example 16, ..." and code from **Example 16**, lines 15-21; "`<z:travelPolicy...`".)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Mani and Mitra in order to allow

Mani's teachings to be applied to a broader range of web services, i.e. ones in which SOAP intermediaries can be on a single computing system, and specific implementations such as the example illustrating in Mitra's teaching.

7. As to claim 18, Mani discloses a computer program product for use in a network environment that includes a receiving computing system capable of receiving messages from other computing systems in the network environment, the receiving computing system including a dispatching component that dispatches a received message to groups of one or more methods for further processing, the computer program product for performing a method for the dispatching mechanism to dispatch a received message without having direct access to at least a portion of information relevant for the dispatch, and the information is not being included in the message as received by the receiving computing system (page 1, paragraph 2, an intermediary reads on "the receiving computing system" and possesses a dispatching component as it "forward[s] the altered message to the ultimate receiver"), the computer program product comprising one or more recordable type computer-readable media having thereon computer-executable instructions that, when executed by one or more processors of the computing system, cause the computing system to perform the following:

an act of accessing a received message the message being received at the receiving computing system (page 1, paragraph 2 lines 4-5, intercepting reads on receiving);

an act of a receiving path component modifying the received message with at least one modification, the modification including information that is not included in the received message (page 2, paragraph 7: bullet points 1 through 3, intermediary can remove or add SOAP headers); and

an act of providing the modified message at least indirectly through one or more other receiving path components to the dispatching mechanism so that the dispatching mechanism, based on the information obtained in the modification may use the obtained information to dispatch the message to a group of one or more methods for further processing (page 2, paragraph 7: bullet point 3, the intermediary node can modify the message's path by adding new intermediaries to it).

But, Mani does not explicitly disclose the dispatching the message to a group of one or methods within the receiving computing system, and the methods being configured to process the message according to the type of information included in the message. Rather, Mani discloses dispatching a message from one SOAP intermediary to another; not explicitly disclosing, one way or the other, if the SOAP intermediaries are on the same computing system or separate computing systems and further not disclosing that the type of information effects how an appropriate method processes the message.

However, Mitra discloses that SOAP nodes (and, by extension SOAP intermediaries) are applications defined by universal resource indicators (page 18, sec. 3.1: paragraph 3; "In Example 7a,...") and routing messages among SOAP intermediaries associated with applications (page 36, sec. 5.1: paragraphs 1-3, multiple applications can be stored on the same system as they are all associated with a common web server). Mitra further discloses methods are effected by the type of information that is included in the message (page 37: paragraph 3; "Example 16, ..." and code from **Example 16**, lines 15-21; "`<z:travelPolicy...`".)

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Mani and Mitra in order to allow Mani's teachings to be applied to a broader range of web services, i.e. ones in which SOAP intermediaries can be on a single computing system, and specific implementations such as the example illustrating in Mitra's teaching.

8. As to claims 32 and 34, they are rejected by the same rationale set forth in claim 1's rejection.

9. As to claims 2 and 19, Mani discloses the message includes a Simple Object Access Protocol (SOAP) envelope (page 5, Listing 2), and wherein the act of at

least one of the one or more receiving path components modifying the messages comprises the following:

an act of adding a SOAP header with additional information to the message (page 7, paragraph 7: bullet point 3).

10. As to claims 3 and 20, Mani discloses an act of add at least one data field to the message (page 2, paragraph 7: bullet point 3).

11. As to claims 4 and 21, Mani discloses an act of modifying at least one data field in the message (page 2, paragraph 7: bullet point 3).

12. As to claims 5 and 22, Mani discloses an act of deleting at least one data field from the message (page 2, paragraph 7: bullet point 2).

13. As to claim 6, Mani discloses an act of a receiving component modifying the message (page 2, paragraph 7: bullet point 2).

14. As to claim 7, Mani discloses an act of a receiving path component other than the receiving component modifying the message (page 2, paragraphs 6 and paragraph 7: bullet point 3, multiple intermediaries can process the message).

15. As to claim 8, Mani discloses an act of a single receiving path component modifying the message (page 2, paragraph 7: bullet point 3, if there is only one intermediary, there is only a single receiving path component).

16. As to claim 9, Mani discloses an act of a plurality of receiving path components modifying the message (page 2, paragraphs 6 and paragraph 7: bullet point 3, multiple intermediaries can process the message).

17. As to claims 10 and 23, Mani discloses the at least one modification includes a connection identification identifying a connection that the message was received over (page 3, paragraph 6 ["WS-Routing describes..."]: line 2-3).

18. As to claims 11 and 24, Mani discloses the at least one modification includes a protocol type used to receive the message (page 5, Listing 2, all of the URLs indicate proctocol type, e.g. http://www.ibm.com/quotesservice, indicates HTTP was used).

19. As to claims 14 and 27, Mani discloses the at least one modification includes information related to a status of a sender of the message (page 3, paragraph 6 ["WS-Routing describes..."], lines 1-4, the sender status is indicated in that it is the originator of the message).

20. As to claim 16, Mani discloses:

an act of accessing a dispatch rule that references information present in the at least one modification to the message (page 4, bullet point 2 ["The WS-Routing intermediary..."]) and

an act of dispatching the message according to the dispatch rule (page 4, bullet point 2 ["The WS-Routing intermediary"]) and.

21. As to claim 17, Mani discloses the dispatch rule is expressed using one or more XPATH statements (page 5, Listing 2).

22. As to claims 29, Mani discloses the one or more computer-readable media comprise physical memory media (inherent in page 1: paragraph 2).

23. As to claims 30, Mani discloses the one or more computer-readable media comprises persistent memory (inherent in page 1: paragraph 2).

24. As to claims 31, Mani discloses the one or more computer-readable media comprises system memory (inherent in page 1: paragraph 2).

25. As to claim 33, Mani discloses:

an act of receiving the message (page 1, paragraph 2 lines 4-5, intercepting reads on receiving);

an act of passing the received message through one or more receiving path components that are positioned in the receiving path of the message prior to being passed to the dispatching component (page 2, paragraph 2:lines 2-3, messages are processed before they are forwarded (dispatched));

an act of at least one of the one or more receiving path components modifying the message with at least one modification (page 2, paragraph 7: bullet points 1 through 3, intermediary can remove or add SOAP headers); and

an act of the dispatching mechanism receiving the modified message from the receiving path (page 2, paragraph 2:lines 2-3, messages are processed before they are forwarded (dispatched)).

26. As to claims 12 and 25, Mitra discloses the at least one modification includes a time that the message was received (Page 36, sec. 5.1:paragraph 3).

27. As to claim 35, Mitra discloses an act of selecting an appropriate method from the group of methods, wherein the selection is based on the type of information included in the modification (page 37: paragraph 3; "Example 16, ..." and code from **Example 16**, lines 15-21; "`<z:travelPolicy...".`)

28. As to claim 36, Mitra discloses each type of information included in the modification is a factor in determining which method to select (page 37:

paragraph 3; "Example 16, ..." and code from **Example 16**, lines 15-21; "<z:travelPolicy…".)

29. As to claim 37, Mitra discloses the message is dispatched to a method appropriate for the protocol (page 23, sec. 4: paragraph 1).

30. As to claim 38, Mitra discloses the body of the received message is modified to include information not included in the received message (page 36, sec 3: paragraph 3).

31. Claims 13, 15, 26, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mani in view of Mitra as applied to claim 1 above, and further in view of what was well in the art at the time of the invention.

32. As to claims 13 and 26, Mani and Mitra disclose the invention substantially with regard to the parent claim 1, but does not explicitly disclose the at least one modification includes information related to a handling priority of the message.

However, given the objectives of Mani's disclosed use of SOAP intermediaries ("Web-intermediaries are widely in use, offering functions like customization, personalization, caching, filtering, and transcoding by modifying and enhancing data as it flows between a Web client and server" (page 1,

paragraph 2:lines 2-4)), it would have been obvious to one of ordinary skill in the art to prioritize any data as it flows between a Web client and a server (i.e. this is a form of customization and filtering). Therefore, Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to use a known practice (prioritize data processing) in order to allow finer control of data as it flows through a Web services system.

33. As to claims 15 and 28, Mani and Mitra disclose the invention substantially with regard to the parent claim 1, but does not explicitly disclose the at least one modification includes information related to load of the computing system.

However, given the objectives of Mani's disclosed use of SOAP intermediaries ("Web-intermediaries are widely in use, offering functions like customization, personalization, caching, filtering, and transcoding by modifying and enhancing data as it flows between a Web client and server" (page 1, paragraph 2:lines 2-4)), it would have been obvious to one of ordinary skill in the art to include load information of Web services in a message that flows between a Web client and a server (i.e. this is a form of customization). Therefore, Official Notice is taken that it would have been obvious to one of ordinary skill in the art at the time of the invention to use a known practice (prioritize data processing) in order to allow finer control of a Web services system.

Conclusion

34. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

35. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

36. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. J. D./
Examiner, Art Unit 2152

/Jeffrey Pwu/
Supervisory Patent Examiner, Art Unit 2146